## II. AMENDMENTS TO THE CLAIMS

- 1-14. (canceled).
- 15. (New) A method for producing an absorbent fiber product comprising:
  treating a parent fiber product with a fluid medium such that fibers of the parent fiber
  product are at least partially wetted, and

rapidly evaporating the fluid medium by irradiation between the fibers, so that evaporation pressure generated by the evaporating fluid medium has a kinematic effect on the fibers, which increases the distance between the fibers.

- 16. (New) The method of claim 15, wherein the parent fiber product is exposed to a fluid medium in a form selected from vapor and emulsion.
- 17. (New) The method of claim 16, wherein the parent fiber product is exposed to at least one of vapor deposition and vapor saturation by fluid medium in the form of vapor.
- 18. (New) The method of claim 16, wherein the parent fiber product is one of wetted and saturated by fluid medium in the form of an emulsion.
- 19. (New) The method of claim 16, wherein the fibers are homogeneously wetted.
- 20. (New) The method of claim 15, wherein the fibers contact each other at contact points, and wherein the kinematic effect on the fibers compacts the fibers on the contact points.
- 21. (New) The method of claim 15, wherein the fluid medium is rapidly evaporated by microwave radiation.
- 22. (New) The method of claim 21, wherein the fibers are subjected to pulsed microwave radiation.

- 23. (New) The method of claim 21, wherein the microwave radiation comprises wavelengths of between approximately 1000 nm and approximately  $1000 \text{ }\mu\text{m}$ .
- 24. (New) The method of claim 21, wherein the microwave radiation comprises wavelengths that are absorbed less by the fibers than by the fluid media.
- 25. (New) The method of claim 21, wherein exposure time of the pulsed microwave radiation is between approximately 1 µs and approximately 1000 ms.
- 26. (New) The method of claim 21, wherein power density of the pulsed microwave radiation is between approximately 10<sup>3</sup> and approximately 10<sup>6</sup> W/mm<sup>2</sup>.
- 27. (New) The method of claim 15, further comprising adjusting a time period between the wetting of the fibers with the fluid medium and the rapid evaporation of the fluid medium so that diffusion of the fluid medium is directed at least one of in between and into the fibers.
- 28. (New) The method of claim 15, further comprising treating, subsequent to the rapid evaporation of the fluid medium, the parent fiber product with a fluid fixative.
  - 29. (New) An absorbing fiber product produced by the method of claim 15.
- 30. (New) An absorbing fiber product according to claim 29, which is a hygiene fiber product selected from the group consisting of paper toweling, toilet paper, and tissues.
- 31. (New) A method for producing an absorbent fiber product, comprising contacting a parent fiber product with a fluid medium such that fibers of the parent fiber product are at least partially wetted, and irradiating the fibers so that fluid medium between the fibers is rapidly evaporated and an absorbent fiber product is produced that has greater absorbency than the parent fiber product.

- 32. (New) The method of claim 31, wherein the parent fiber product is exposed to a fluid medium in a form selected from vapor and emulsion.
- 33. (New) The method of claim 31, wherein the fibers are homogeneously wetted.
- 34. (New) The method of claim 31, wherein power density of the irradiation is between approximately  $10^3$  and approximately  $10^6$  W/mm<sup>2</sup>.